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What is Claimed:

1. A method for logging updates to a plurality of data records into discrete pages in non-volatile storage, wherein a page partially full of data is known as a partial page, said method comprising the steps of:

4 establishing identical partial pages I and I+1 at the earliest opportunity,
5 in response to a data segment D larger than the remaining space of a most recent
6 updated partial page I, partitioning D into a first segment D1 sufficient to fill the remaining
7 space of page I and a second data segment D2,

8 filling page I with a first write operation of its present contents concatenated with D1,
9 and

10 creating identical partial pages I+1 and I+2 with a single, second write operation of
11 D2 to both pages, whereby pages I+1 and I+2 become the new pages I and I+1 for the next
12 logging operation.

13 2. The method of claim 1 further comprising the step of:

14 2 in response to successive data segments D, the first of which is smaller than the
15 remaining space of the most recently updated partial page I, writing page I+1 to the present
16 contents of page I concatenated with D, and thereafter alternating this procedure between
17 pages I and I+1 until a data segment X fills the remaining space of the page containing the
18 most recent update, and at that point writing page I to the value of the most recent update
19 concatenated with the new segment X in a first write operation and writing any remaining part
20 of segment X into both pages I+1 and I+2 in a second write operation..

- 1 3. The method of claim 1 comprising the step of:
- 2 in response to successive data segments D, the first of which is smaller than the
3 remaining space of the most recently updated partial page I, writing page I+1 to the present
4 contents of page I concatenated with D, and thereafter continuing this procedure into
5 successive pages I+2, I+3, etc. until a data segment X fills the remaining space of the page
6 containing the most recent update, and at that point writing page I to the value of the most
7 recent update concatenated with the new segment X in a first write operation and writing any
8 remaining part of segment X into both pages I+1 and I+2 in a second write operation.
- 9 4. Apparatus for logging updates to a plurality of data records into discrete pages in non-volatile storage, wherein a page partially full of data is known as a partial page, comprising:
- 10 means for establishing identical partial pages I and I+1 at the earliest opportunity,
- 11 means responsive to a data segment D larger than the remaining space of a most recent
12 updated partial page I for partitioning D into a first segment D1 sufficient to fill the remaining
13 space of page I and a second data segment D2,
- 14 means for filling page I with a first write operation to its present contents concatenated
15 with D1, and
- 16 means for updating with a second write operation both pages I+1 and I+2 to D2,
17 whereby pages I+1 and I+2 become the new pages I and I+1 for the next logging operation.

- 1 5. The apparatus of claim 4 further comprising
- 2 means responsive to successive data segments D, the first of which is smaller than the
3 remaining space of the most recently updated partial page I for writing page I+1 to the present

4 contents of page I concatenated with D, and means for thereafter alternating this procedure
5 between pages I and I+1 until a data segment X fills the remaining space of the page
6 containing the most recent update, and means for writing page I to the contents of the page
7 containing the most recent update concatenated with the last received data segment X.

1 6. The apparatus of claim 4 further comprising:

2 means responsive to successive data segments D, the first of which is smaller than the
3 remaining space of the most recently updated partial page I for writing page I+1 to the present
4 contents of page I concatenated with D, and means for thereafter continuing this procedure
5 into successive pages I+2, I+3, etc. until a data segment X fills the remaining space of the
6 page containing the most recent update, and means for writing page I to the contents of the
7 page containing the most recent update concatenated with the last received data segment X.

7. A storage medium for storing computer program instructions that when loaded into a computer performs the steps of claim 1 or claim 2 or claim 3.

8. A carrier wave containing computer program instructions that when loaded into a computer performs the steps of claim 1 or claim 2 or claim 3.